A CASE OF SYRINGOMYELIA WITH UNUSUAL SYMPTOMS; AUTOPSY; MICROSCOPICAL REPORT.*

By W. N. Bullard, M.D. and J. J. Thomas, M.D.

Drs. Bullard and Thomas reported the case of a boy, previously healthy and of fairly healthy antecedents, who, when three years old, became subject to attacks of headache of much severity, lasting an hour or more; these increased in frequency and severity, and were soon accompanied by vomiting. This condition continued three years, growing gradually worse, and at the end of that time staggering was noticed and a severe double optic neuritis occurred, which soon produced double optic atrophy and nearly total blindness. The headaches, vomiting attacks and blindness continued much the same for nearly two years—the remainder of the patient's life. At times the pain and prostration were such that he was in bed for days or weeks at a time; then he would improve, and would be able to be up and about like a healthy child. During this time the general adipose tissue increased greatly, so that the patient became obese; and to this condition were added, later, exophthalmos and an appearance suggesting myxœdema. These two symptoms, however, disappeared after a month or two. During the first part of this time (in March, 1895) temporary paresis of both external recti and nystagmus were noticed. No further changes in the symptoms occurred until about ten months after the blindness began, when paraplegia, accompanied by incontinence of urine and fæces, began suddenly and became permanent. At the same time a temporary paralysis of the left face and some weakness of the upper extremities appeared. Bed-sores developed, but later improved, and the child was in good general condition, although the obesity had somewhat diminished at the time of death, which resulted from typhoid fever.

At the autopsy a marked dilatation of all the ventricles and of the iter was found. The branching cavity in the cord seemed to originate in the gray matter, and not to be a diverticulum of the central canal, although at the point of greatest dilatation of the cavity, in the lower cervical region, the central canal opened into and became a part of the general cavity. Above the point of greatest dilatation of the cavity was an ascending degeneration of the direct cerebellar tract, the tract of Gowers, and the posterior columns. Below this point marked degeneration of the direct and crossed pyramidal tracts, diffuse atrophy of the posterior columns, and well-marked atrophy of the tract of Gowers were found. At the point of greatest dilatation of the cavity were extensive degeneration of all the fibres of the white matter of the cord, and marked distortion of the gray matter, in which, however, fairly normal nerve cells in moderate numbers were found. The neuroglia fibres in the atrophied tracts were increased, and the neuroglia proliferation about the cavity in the cord was distinct.

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*Read at the twenty-fourth annual meeting of the American Neurological Association, May, 1898.

THE NEUROLOGICAL ASPECT OF PUBLIC-SCHOOL EDUCATION.*

BY JOHN PUNTON, M.D.

Dr. Punton believed that serious defects still existed in the routine methods of public-school education and training of the young, which were attested not only by the general public but also by the teachers and officers of schools. Moreover, all recognized that marked constitutional differences and defects existed in both mind and body in children of every class of society, but the special relation which they bore to modern educational methods was not so well understood as it should be. The vital relation of these lesions of organization to the proper protection and health of the race on the one hand, and the prevailing vices and social evils on the other, together with their special relation to public-school education, presented a phase of the subject which so far had received but little attention in America, but which really constituted the neurological aspect of education. What was necessary to be done, nay, even demanded, was to fix certain definite standards of weight and measurements for every age and height; any pupil found to be above or below this standard should be treated accordingly. In almost every city in the world anthropometrical investigations had now been made, and the unanimous verdict had been reached that the mental output of the pupil was directly related to his height, weight and physical measurements, and that there was a physical basis for precocity on the one hand and mental dullness on the other.

DISCUSSION.

Dr. Worcester expressed his entire approval of the contents of this paper, and his belief that the present system of education for young children, at least, is radically defective. He believed that children were kept steadily in school at work which is often distasteful to them, until they got a strong dislike for study, and that the results, in the matter of acquisition

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